

ITD'S 2009 PATHWAY VIDEOLOG CHEATSHEET

2009 VideoVan



MARCH 2010

TABLE OF CONTENTS

Introduction	1
Opening the 2009 Videolog	2
Choosing the View for 2009	5
Road Condition Information System Screen Organization	6
Using the Videolog	7
Videolog Screens	8
Closing the Videolog	10
Exporting Data	10
Filters	14
Find Feature	15
Hands Free Playing	16
Image Window Sizing	16
Image Window Picture Controls	17
Print Screen	18
Sensor Data Graph	19
Severity Analysis	21
Severity Reports	22
Skip Box	24
Zoom View	25
Transverse Graphs	27
Saving Transverse File	29
Transverse Profile 3D Graph	30
Troubleshooting the Videolog Software	32

INTRODUCTION

All VideoLog users will need to keep both the 2008 and 2009 versions of the software on their systems. The software for the van purchased in 2009 differs slightly from the software previously used. As a result, the 2009 software should be used when working with data from 2009 forward and the 2008 software should be used with 2008 and earlier.

The 2008 VideoLog covers both directions in all Districts. In the 2009 Hi-Def system, only Districts 1, 2, 4, and 6 had both directions shot. District 3 and 5 only had the Highway Performance Monitoring System (HPMS) direction completed in 2009.

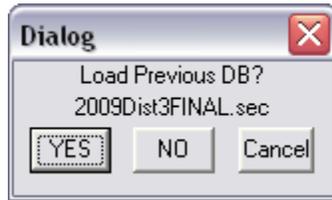
Several useful features have been added with the new software.

OPENING THE 2009 VIDEOLOG:

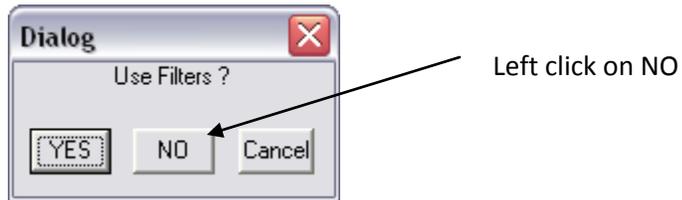
Double left click on the 2009Pathway shortcut icon.



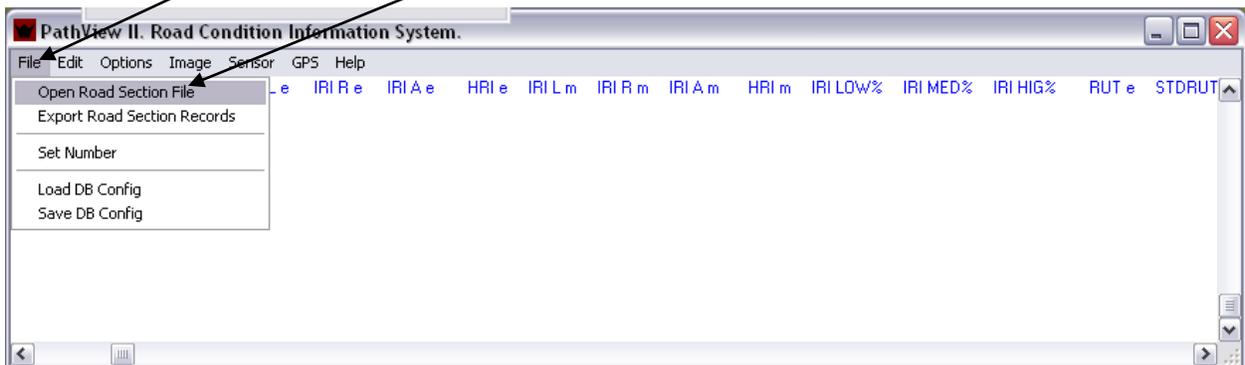
This screen will appear. It will take you to the last database used. If you are at the District level – you can say YES, since you will normally be looking only at your district. At the Headquarters level – say NO, it will then give you a choice of Districts. Then click on the district of choice.



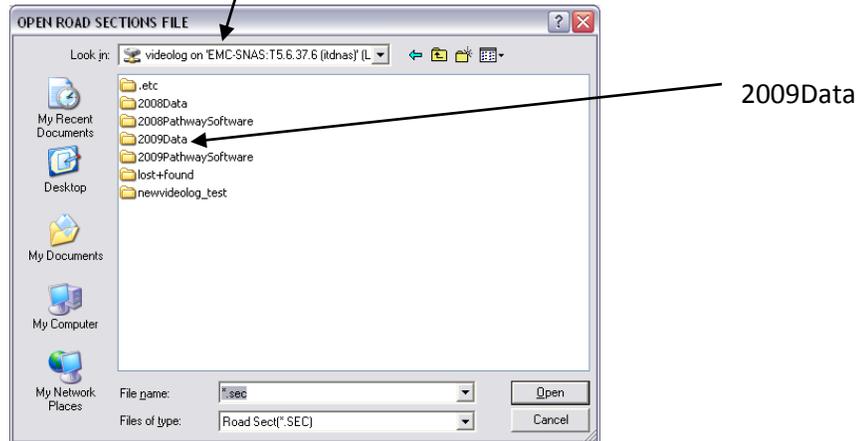
Once the .sec file is opened, the next prompt is Use Filters? Say NO. Additional information on filters is available in the filter section of this handout. The default is set to Yes.



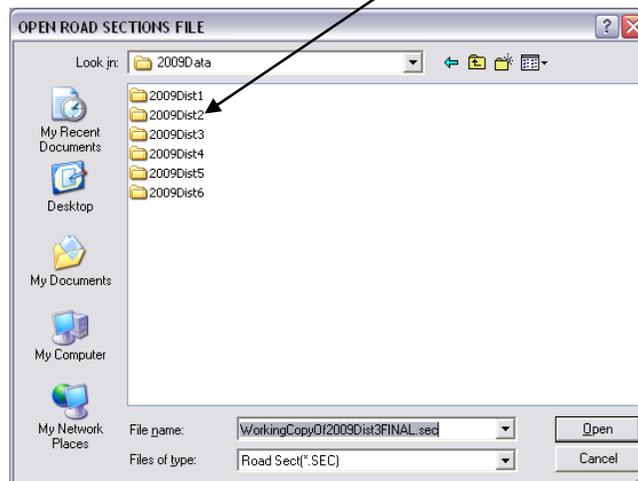
Under the heading File – choose Open Road Section File.



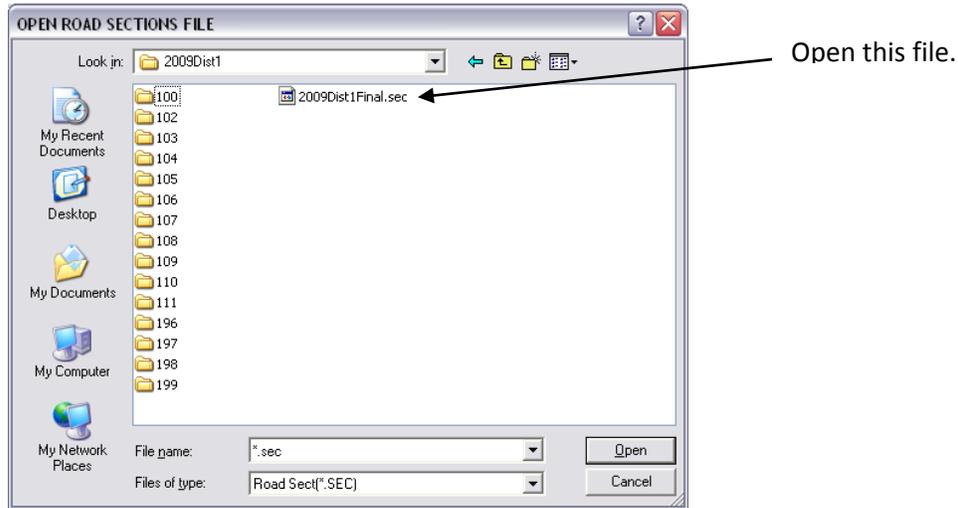
At Headquarters the 2009 data is located on the “EMC-SNAS:T5.6.37.6 (itdnas)”. In the Districts, the data resides on your local server.



Then choose the district of interest and double click on the folder.



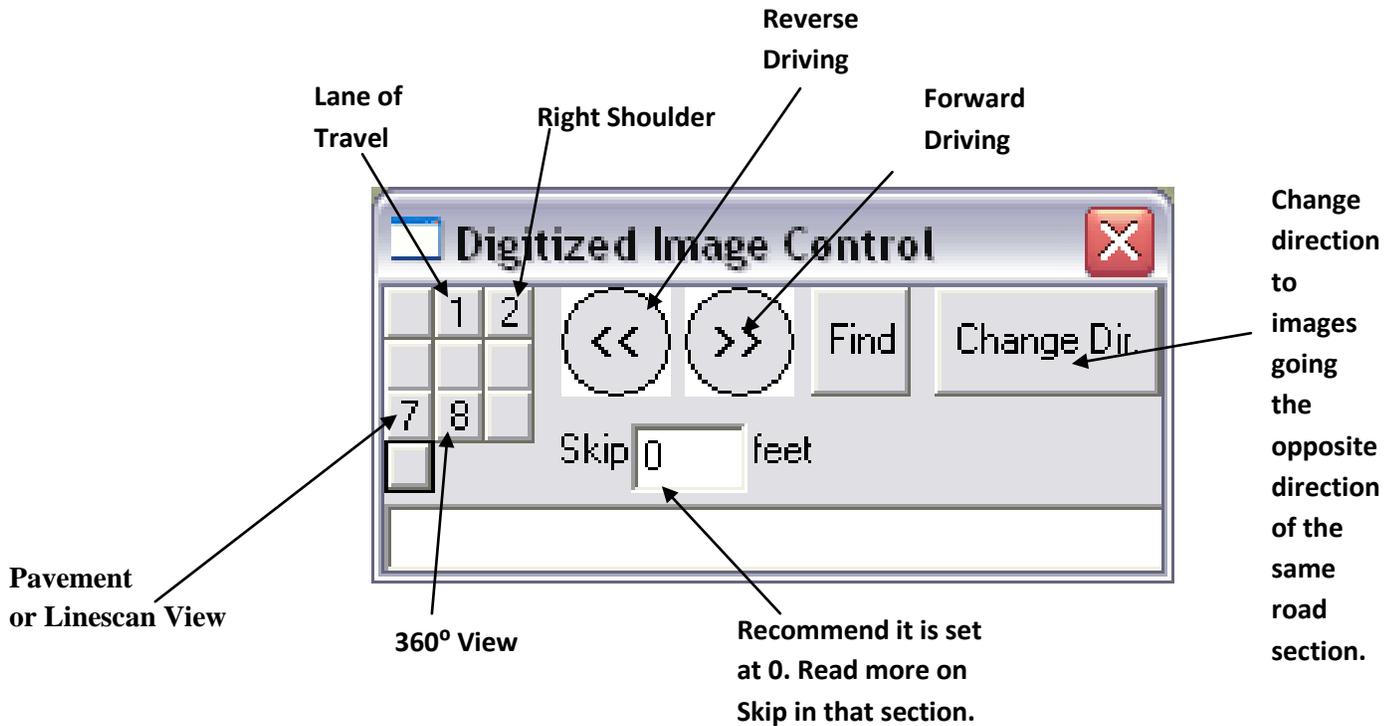
Double click on the .sec file to open the database, 2009Dist#Final.sec.



Note: All videolog Databases end with the extension “.sec”.

CHOOSING THE VIEWS FOR 2009:

Each of the views can be toggled on and off by clicking on the squares in the Digitized Image Control screen.



ROAD CONDITION INFORMATION SYSTEM SCREEN ORGANIZATION

In the Road Condition Information System screen, roads are sorted in the following order:

- 1 - Interstate Highways Business Loops (IB###)
- 2 - Interstate Interchanges (IC###)
- 3 - Interstate Spur (IS###)
- 4 - Interstate Highways (I####)
- 5 - State Highway Business (SB###)
- 6 - State Highways Connector (SC###)
- 7 - State Highways (SH###)
- 8 - State Highway Spur (SS###)
- 9 - U. S. Highway Business (USB###)
- 7 - U.S. Highways Connector (USC##)
- 8 - U.S. Highway Spur (USS##)
- 7 - U. S. Highway (US###).

Within each of the highway systems, it is arranged numerically by highway number in an ascending order (SH021 – SH055).

It is further sorted within each highway number numerically in the increasing direction (I) prior to the decreasing direction (D).

It is further listed under the increasing direction, numerically by milepost in an ascending order (MP. 1.000- 100.000).

The decreasing direction is listed numerically within the mileposts in a descending order (MP. 100.0000 – 1.000).

Example:

Highway Number

Mile Post

Direction of Travel

Type of Road

Num	Proje	MapID	Dis	Route	Di	Co	Road	FRIPost	TRIPost	From	To	DD	StartRef	Offset(m)	EndRef	Offset(m)
783	0	787	0		0	0		0.000	0.000	0.000	0.000	I	0	0.000	0	0.000
784	0	788	0	16831	2	0	USC95	0.000	0.060	0.000	0.060	I	0	0.000	0	0.000
785	0	789	0		0	0		0.000	0.000	0.000	0.000	I	0	0.000	0	0.000
786	0	790	0	16832	2	0	USC95	0.000	0.060	0.000	0.060	I	0	0.000	0	0.000
787	0	791	0		0	0		0.000	0.000	0.000	0.000	I	0	0.000	0	0.000
788	0	790	0	25521	2	0	USC95	0.000	0.060	100.000	100.075	I	0	0.000	0	0.000
789	0	791	0		0	0		0.000	0.000	0.000	0.000	I	0	0.000	0	0.000
790	1	792	0	1552	2	0	USS95	323.050	323.190	323.050	323.190	I	0	0.000	0	0.000
791	0	793	0		0	0		0.000	0.000	0.000	0.000	I	0	0.000	0	0.000
792	0	794	0	1552	2	0	USS95	323.190	323.050	323.190	323.050	D	0	0.000	0	0.000
793	0	795	0		0	0		0.000	0.000	0.000	0.000	I	0	0.000	0	0.000
794	0	800	0	1902	2	0	US012	0.275	0.381	0.275	0.381	I	0	0.000	0	0.000
795	0	801	0		0	0		0.000	0.000	0.000	0.000	I	0	0.000	0	0.000
796	1	802	0	1902	2	0	US012	0.000	1.000	0.000	1.000	I	0	0.000	0	0.000

USING THE VIDEOLOG

Locate the road of interest on the Road Condition Information System screen.

For demonstration purpose we will use District 1, 10090 (Interstate 90) MP. 15.

Num	Route	Text2	County Name	Di	Co	Road	Road--From	Road----To	FRIPost	TRIPost	From	To	DI
177	8339			1	0	10090			16.000	15.000	16.000	15.000	
178	8339			1	0	10090			15.000	14.781	15.000	14.781	
179	1660			1	0	10090			14.781	14.000	14.781	14.000	
180	1660			1	0	10090			14.000	13.000	14.000	13.000	
181	1660			1	0	10090			13.000	12.000	13.000	12.000	
182	1660			1	0	10090			12.000	11.000	12.000	11.000	
183	1660			1	0	10090			11.000	10.000	11.000	10.000	
184	1660			1	0	10090			10.000	9.000	10.000	9.000	
185	1660			1	0	10090			9.000	8.000	9.000	8.000	
186	1660			1	0	10090			8.000	7.000	8.000	7.000	

Note: if you have a column showing that you do not wish to view – change it by right clicking on the column. Under width – change the number of characters (Chars) to 0. This will remove the screen from view.

Edit Road Section Data

Records: From 1 To 1

Width: Chars 10 Next 1 Fields

Fields: Title F2 Value Num. Step 0.000

Buttons: OK, Cancel, Help

Edit Road Section Data

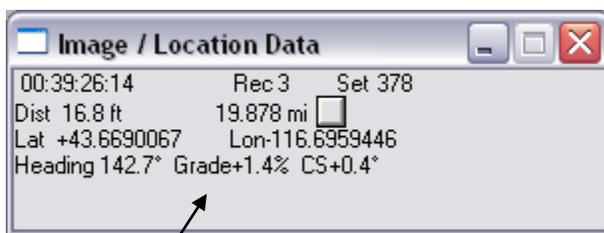
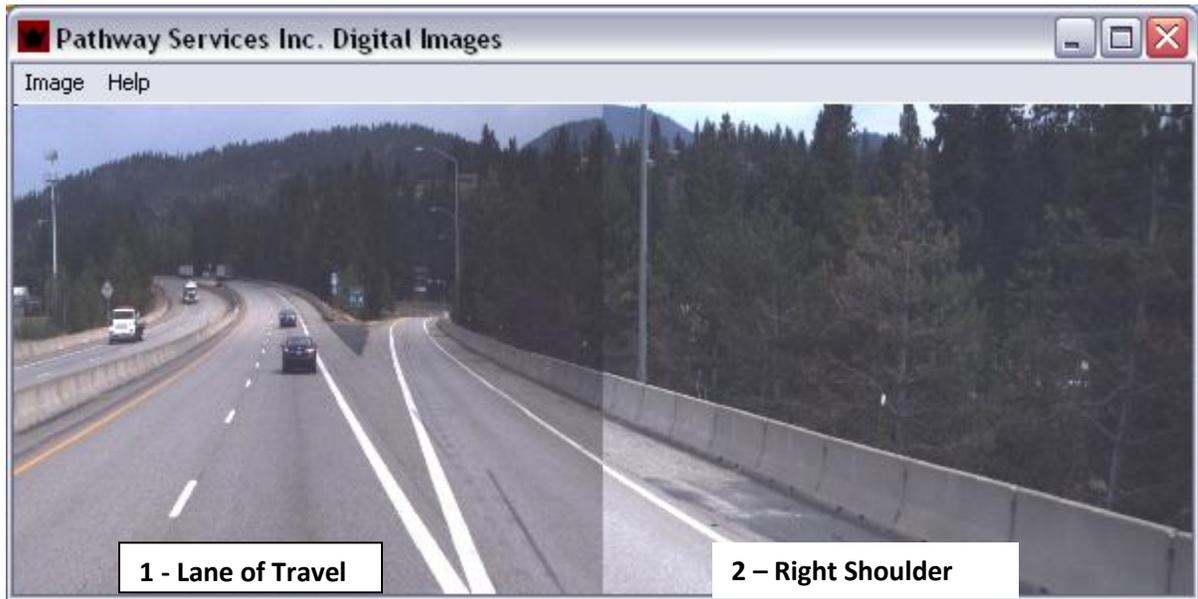
Records: From 1 To 1

Width: Chars 0 Next 1 Fields

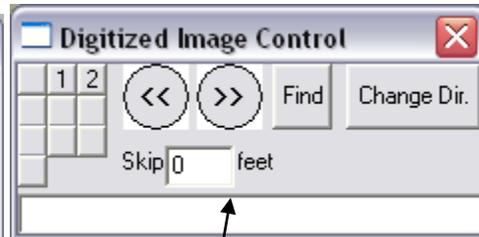
Fields: Title F2 Value Num. Step 0.000

Buttons: OK, Cancel, Help

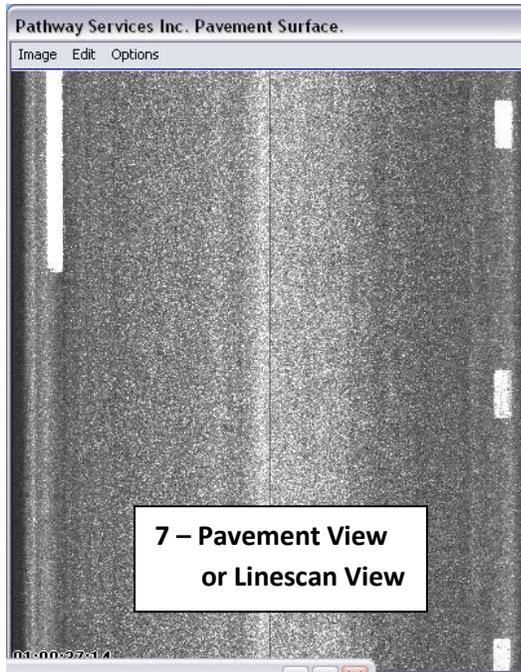
VIDEOLOG SCREENS



Image/Location
Data Screen



Digitized Image
Control Screen



This image shows 26.4 feet in the lane of travel “driven lane”.



When you move your mouse within the 360° view – you can rotate the image to see the complete 360° circle. The 360° camera shoots video ONLY at the major intersections of state highways.

CLOSING THE VIDEOLOG

Close the Pathway software by clicking on the red “X” in the corner of the Road Condition Information System Screen. If you try and close the database by clicking on the red “X” in the corner of the Digital Image screen – it will not close the software.

Num	Road	From	To	DD	StartRef	Offset(m)	EndRef	Offset(m)	Comments	Start-La	Start-Lo	End
1627		63.000	64.000		0	0.000	0	0.000		0.000000	0.000000	0.00
1628		64.000	65.000		0	0.000	0	0.000		0.000000	0.000000	0.00
1629		65.000	66.000		0	0.000	0	0.000		0.000000	0.000000	0.00
1630		66.000	67.000		0	0.000	0	0.000		0.000000	0.000000	0.00
1631		67.000	68.000		0	0.000	0	0.000		0.000000	0.000000	0.00
1632		68.000	69.000		0	0.000	0	0.000		0.000000	0.000000	0.00
1633		69.000	70.000		0	0.000	0	0.000		0.000000	0.000000	0.00
1634		70.000	71.000		0	0.000	0	0.000		0.000000	0.000000	0.00
1635		71.000	72.000		0	0.000	0	0.000		0.000000	0.000000	0.00
1636		72.000	73.000		0	0.000	0	0.000		0.000000	0.000000	0.00
1637		73.000	74.000		0	0.000	0	0.000		0.000000	0.000000	0.00
1638		74.000	75.000		0	0.000	0	0.000		0.000000	0.000000	0.00
1639		75.000	76.000		0	0.000	0	0.000		0.000000	0.000000	0.00

EXPORTING DATA

First you must choose the columns/fields of data to be exported. **Always remember to choose Road and the mile markers (which are From and To)!** To mark the fields to be exported - use the Road Condition Information System Screen. In the column below the title heading that is to be marked – hold the control key down and click anywhere within that column. If the column title lettering is blue – it has been successfully chosen. If the column title is black – it has not been chosen.

Always Remember to Choose Road, From and To!

Field/Column is chosen.

Field/Column is not chosen.

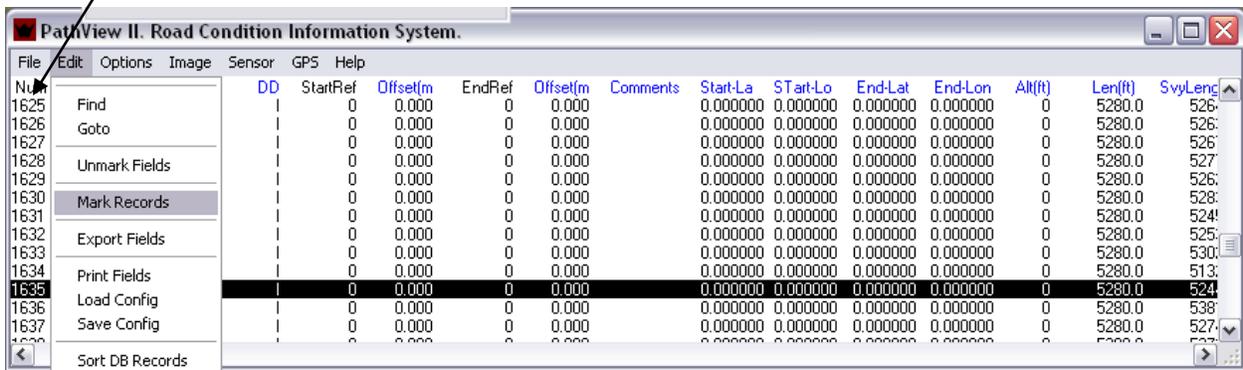
Num	Proj	MapID	Dis	Route	Di	Co	Road	FRIPost	TRIPost	From	To	DD	StartRef	Offset(m)	EndRef	Offset(m)	C
5	0	5	0	16396	2	0	SC003	0.090	0.000	0.090	0.000	D	0	0.000	0	0.000	
6	0	6	0		0	0		0.000	0.000	0.000	0.000		0	0.000	0	0.000	
7	1	7	0	1800	2	0	SH003	0.000	1.000	0.000	1.000		0	0.000	0	0.000	
8	1	8	0	1800	2	0	SH003	1.000	2.000	1.000	2.000		0	0.000	0	0.000	
9	1	9	0	1800	2	0	SH003	2.000	2.484	2.000	2.484		0	0.000	0	0.000	
10	1	10	0	1800	2	0	SH003	2.502	3.000	2.502	3.000		0	0.000	0	0.000	
11	1	11	0	1800	2	0	SH003	3.000	4.000	3.000	4.000		0	0.000	0	0.000	
12	1	12	0	1800	2	0	SH003	4.000	5.000	4.000	5.000		0	0.000	0	0.000	
13	1	13	0	1800	2	0	SH003	5.000	6.000	5.000	6.000		0	0.000	0	0.000	
14	1	14	0	1800	2	0	SH003	6.000	7.000	6.000	7.000		0	0.000	0	0.000	
15	1	15	0	1800	2	0	SH003	7.000	8.000	7.000	8.000		0	0.000	0	0.000	
16	1	16	0	1800	2	0	SH003	8.000	9.000	8.000	9.000		0	0.000	0	0.000	
17	1	17	0	1800	2	0	SH003	9.000	10.000	9.000	10.000		0	0.000	0	0.000	
18	1	18	0	1800	2	0	SH003	10.000	11.000	10.000	11.000		0	0.000	0	0.000	

Marked Records

Under edit, Road Conditions Information System screen, mark the record(s) that you want to use. Records can be marked in 2 ways. The first method is by choosing Edit, then Mark Records. Enter the Record number that appears at the far left of the screen. The second method is to find the first record of

interest, left click on that record, then press the shift key down and scroll down to the last record of interest and then left click on that record. Marked Records will appear blackened.

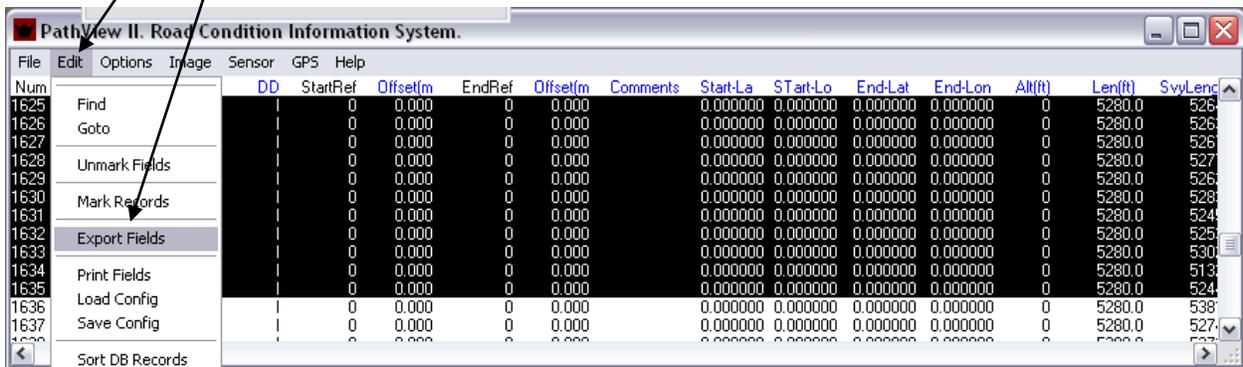
Record Number



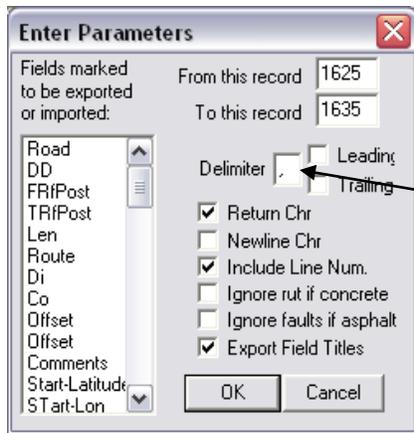
2nd method of choosing records

Next, choose Edit on the Road Condition Information System screen and then

Export Fields.

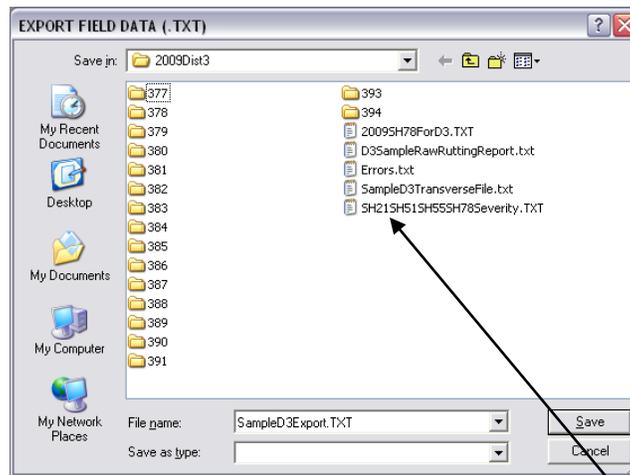


The Enter Parameters screen will appear to allow you to verify the fields to be exported. If a column appears that is not needed, you must first press the cancel button, and start the process again. If a column is missing you must start over, by choosing the columns and then by marking the records. If an extra column appears it is easier to continue on and export the field, then just erase that column within Excel.

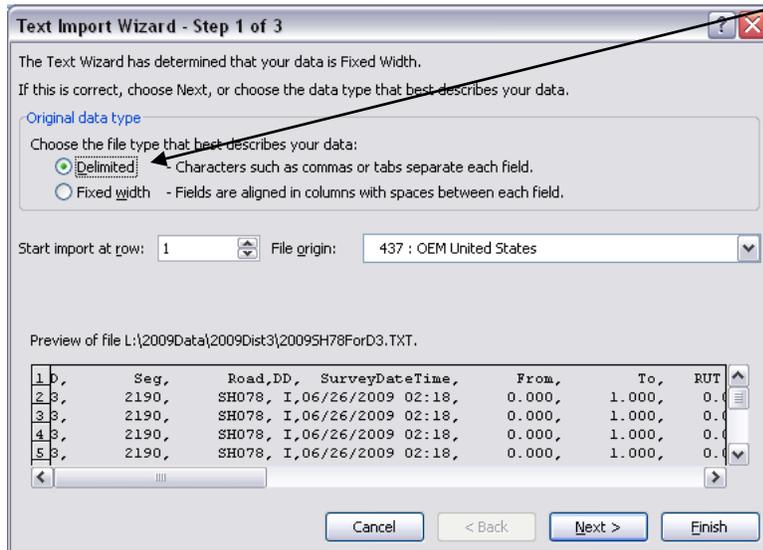


Comma delimited files are the easiest to use.

Name the file. It must have the extension of .txt.



Once the .txt file is saved, it can be opened in Excel. Open Excel and then the .txt file. When the file is opened – you will need to change the default from Fixed Width to Delimited.



Click Next. Here is your data in Excel format.

Choose Comma

Choose Next

ID	Seg	Road	DD	SurveyDateTime	From	To
3	2190	SH078	I	06/26/2009 02:18	0.000	1.000
3	2190	SH078	I	06/26/2009 02:18	0.000	1.000
3	2190	SH078	I	06/26/2009 02:18	0.000	1.000
3	2190	SH078	I	06/26/2009 02:18	0.000	1.000

Default on the delimiters will be Tab. Change it to Comma. Verify that all the columns line up correctly. Press Next.

Click on Finish.

ID	Seg	Road	DD	SurveyDateTime	From	To
3	2190	SH078	I	06/26/2009 02:18	0.000	1.000
3	2190	SH078	I	06/26/2009 02:18	0.000	1.000
3	2190	SH078	I	06/26/2009 02:18	0.000	1.000
3	2190	SH078	I	06/26/2009 02:18	0.000	1.000

Keep all the columns on General. Click on Finish. Save the project as an Excel file.

D	Seg	Road	DD	SurveyDt	From	To	RUT e	Start-Mi	End-Mi	IRI Le	IRI Re	RUT Le	RUT Re	RutAvg
2	3	2190	SH078	I	#####	0	1	0.03	0	0.1	129	143	0.16	0.15
3	3	2190	SH078	I	#####	0	1	0.03	0.1	0.2	78	102	0.17	0.16
4	3	2190	SH078	I	#####	0	1	0.03	0.2	0.3	76	91	0.17	0.14
5	3	2190	SH078	I	#####	0	1	0.03	0.3	0.4	57	70	0.15	0.13
6	3	2190	SH078	I	#####	0	1	0.03	0.4	0.5	50	55	0.14	0.14
7	3	2190	SH078	I	#####	0	1	0.03	0.5	0.6	59	57	0.12	0.12
8	3	2190	SH078	I	#####	0	1	0.03	0.6	0.7	61	52	0.13	0.12
9	3	2190	SH078	I	#####	0	1	0.03	0.7	0.8	65	69	0.14	0.12
10	3	2190	SH078	I	#####	0	1	0.03	0.8	0.9	61	81	0.13	0.13
11	3	2190	SH078	I	#####	0	1	0.03	0.9	1	64	70	0.13	0.13
12	3	2190	SH078	I	#####	1	2	0.04	1	1.1	117	79	0.14	0.14
13	3	2190	SH078	I	#####	1	2	0.04	1.1	1.2	87	110	0.15	0.14
14	3	2190	SH078	I	#####	1	2	0.04	1.2	1.3	67	72	0.12	0.14
15	3	2190	SH078	I	#####	1	2	0.04	1.3	1.4	70	83	0.17	0.15
16	3	2190	SH078	I	#####	1	2	0.04	1.4	1.5	104	84	0.18	0.17
17	3	2190	SH078	I	#####	1	2	0.04	1.5	1.6	62	83	0.15	0.17
18	3	2190	SH078	I	#####	1	2	0.04	1.6	1.7	101	114	0.15	0.16
19	3	2190	SH078	I	#####	1	2	0.04	1.7	1.8	108	117	0.14	0.13
20	3	2190	SH078	I	#####	1	2	0.04	1.8	1.9	75	91	0.14	0.16
21	3	2190	SH078	I	#####	1	2	0.04	1.9	2	68	79	0.13	0.15
22	3	2190	SH078	I	#####	2	3	0.04	2	2.1	88	92	0.12	0.16
23	3	2190	SH078	I	#####	2	3	0.04	2.1	2.2	83	102	0.13	0.16
24	3	2190	SH078	I	#####	2	3	0.04	2.2	2.3	77	97	0.13	0.15
25	3	2190	SH078	I	#####	2	3	0.04	2.3	2.4	63	75	0.13	0.14

Need to adjust the column size

FILTERS

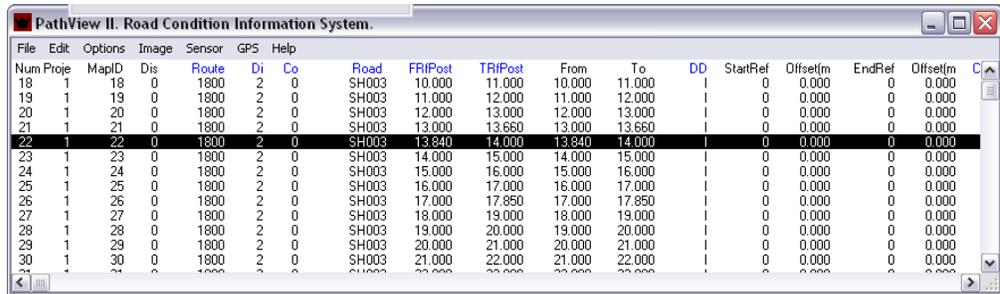
Filters allow you to limit your search to specific sections listed as column headings in the Road Condition Information System screen. There is a limit of 5 filters at any one time.

The most commonly used filters are:

- Project HPMS Series (1)
- Road Road Number (I0090)
- DD Increasing (I) or Decreasing (D) Direction.
- Route Segment Code Number

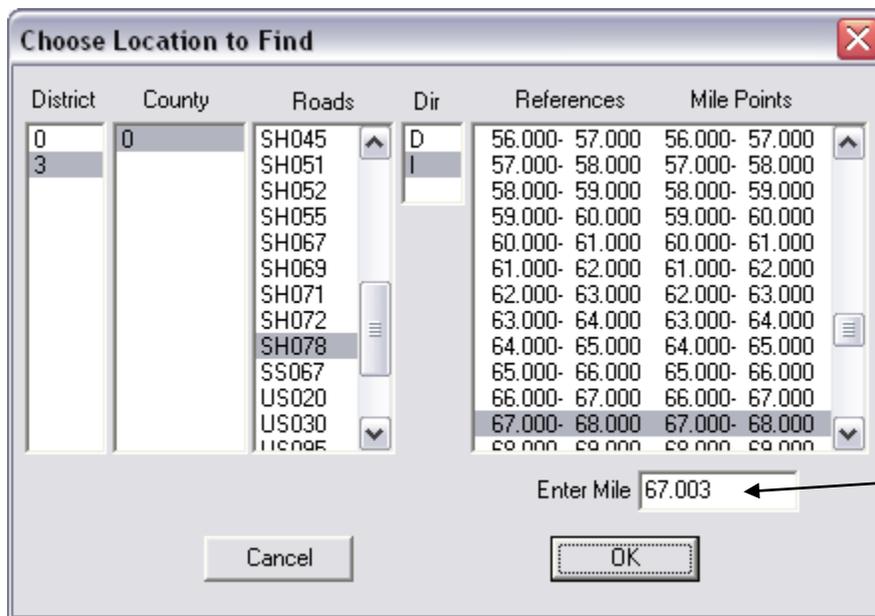
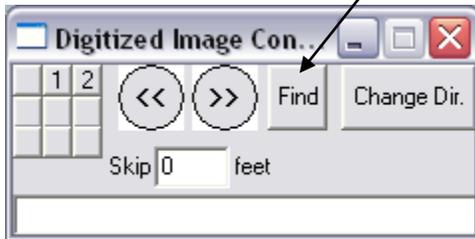
FIND FEATURE

Have a record clicked in the Road Condition Information System screen.



Num	Proje	MapID	Dis	Route	Di	Co	Road	FRIPost	TRIPost	From	To	DD	StartRef	Offset(m)	EndRef	Offset(m)
18	1	18	0	1800	2	0	SH003	10.000	11.000	10.000	11.000		0	0.000	0	0.000
19	1	19	0	1800	2	0	SH003	11.000	12.000	11.000	12.000		0	0.000	0	0.000
20	1	20	0	1800	2	0	SH003	12.000	13.000	12.000	13.000		0	0.000	0	0.000
21	1	21	0	1800	2	0	SH003	13.000	13.660	13.000	13.660		0	0.000	0	0.000
22	1	22	0	1800	2	0	SH003	13.840	14.000	13.840	14.000		0	0.000	0	0.000
23	1	23	0	1800	2	0	SH003	14.000	15.000	14.000	15.000		0	0.000	0	0.000
24	1	24	0	1800	2	0	SH003	15.000	16.000	15.000	16.000		0	0.000	0	0.000
25	1	25	0	1800	2	0	SH003	16.000	17.000	16.000	17.000		0	0.000	0	0.000
26	1	26	0	1800	2	0	SH003	17.000	17.850	17.000	17.850		0	0.000	0	0.000
27	1	27	0	1800	2	0	SH003	18.000	19.000	18.000	19.000		0	0.000	0	0.000
28	1	28	0	1800	2	0	SH003	19.000	20.000	19.000	20.000		0	0.000	0	0.000
29	1	29	0	1800	2	0	SH003	20.000	21.000	20.000	21.000		0	0.000	0	0.000
30	1	30	0	1800	2	0	SH003	21.000	22.000	21.000	22.000		0	0.000	0	0.000

Then right click on the Find button in the Digitized Image Control screen.

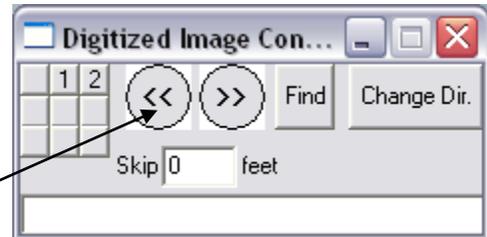


Enter the mileage, click OK, it will take you to that mile point.

Find will allow you to locate another road within the current district database that is opened. Choose the road, and mile points required. Click on the OK button. Once the details are entered – it will take a few minutes to reassemble to the right location.

HANDS FREE PLAYING

This feature allows the user to browse the video without holding the mouse over the play key.



Left click on either set of the double arrow keys “>>” or “<<” and hit the space bar immediately. This will allow for hands free viewing. To stop the process, hit the space bar once.

A 2nd method of starting hands free playing, is by double clicking on either set of double arrow keys. To stop the process, hit the space bar or click on the double arrow key again.

The speed at which the video plays within the hands free mode, can be increased or decreased. Have the hands free mode on, then increase the speed by hitting the + key on your keyboard. The – key will decrease the speed of play.

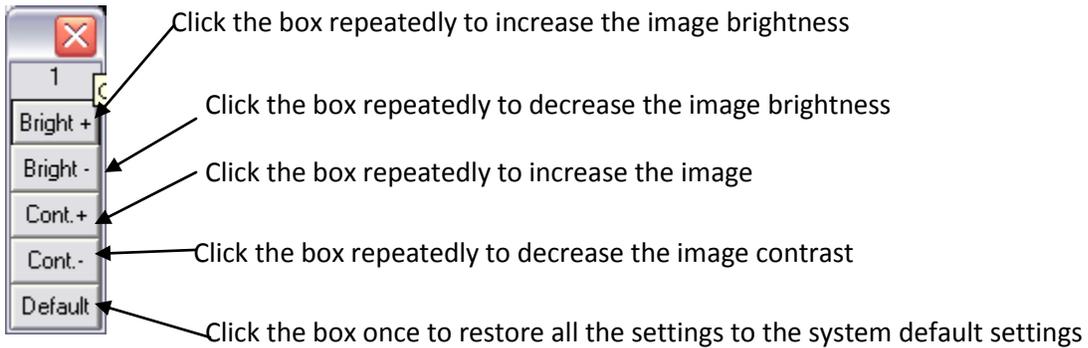
IMAGE WINDOW SIZING

The size of the windows can be changed both vertically and horizontally. Move to the edge of the window, with your mouse, get the double arrow \longleftrightarrow and drag the window to the correct size. It is best to drag image windows from a corner to eliminate distorting the image.

IMAGE WINDOW PICTURE CONTROLS



Click on the word Image in the upper left corner of the image window. This will bring up a screen that will let you adjust the brightness in each image window. Then click in the image that you want to change. Adjust the image by clicking in the box that appears.



SENSOR DATA GRAPH

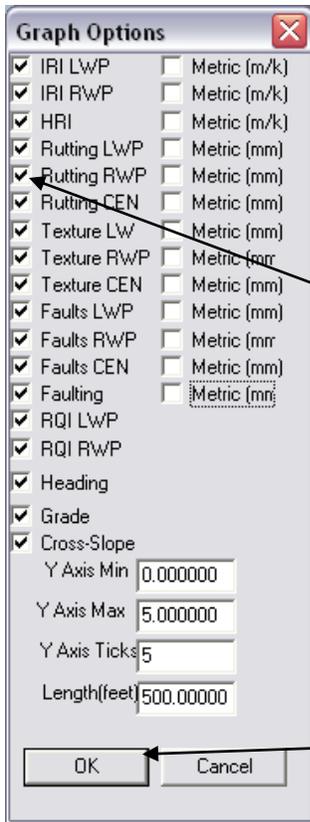
Click on Sensor column in the Road Condition Information System screen. One record must be chosen.

File	Edit	Options	Image	Sensor	GPS	Help											
Num	ime	FiNu	FileRec	IRI L e	IRI R e	IRI A e	HRI e	IRI L m	IRI R m	IRI A m	HRI m	IRI LOW%	IRI MED%	IRI HIG%	RUT e	STDRUT	
9	:05	46	0	64	89	77	62	1.01	1.40	1.21	0.98	98.9	0.8	0.0	0.07	0.1	
10	:09	47	0	81	107	94	78	1.28	1.69	1.48	1.23	92.4	4.5	2.4	0.06	0.1	
11	:12	48	0	76	114	95	77	1.20	1.80	1.50	1.22	94.7	3.2	1.7	0.05	0.1	
12	:14	49	0	86	113	100	87	1.36	1.78	1.57	1.37	93.8	3.7	2.0	0.06	0.1	
13	:17	50	0	126	174	151	123	2.02	2.75	2.38	2.04	77.3	16.1	5.7	0.08	0.1	
14	:20	51	0	94	123	109	94	1.48	1.94	1.71	1.48	91.5	6.7	1.0	0.11	0.1	
15	:22	52	0	86	133	110	95	1.36	2.10	1.73	1.50	93.2	5.1	0.5	0.05	0.1	
16	:24	53	0	97	145	121	103	1.53	2.29	1.91	1.63	92.1	6.6	0.9	0.05	0.1	
17	:00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.05	0.1	
18	:29	56	0	98	158	128	114	1.55	2.49	2.02	1.80	88.2	8.9	1.7	0.06	0.1	
19	:32	57	0	84	138	111	98	1.33	2.18	1.75	1.55	92.5	5.5	1.5	0.06	0.1	
20	:34	58	0	103	139	121	98	1.63	2.19	1.91	1.55	92.0	7.2	0.5	0.12	0.1	
21	:34	59	0	231	276	254	217	3.65	4.36	4.00	3.42	48.0	37.8	14.0	0.15	0.1	

Click on Open/Close Graph.

<p>Open/Close Graph</p> <p>Print Graph</p> <p>Copy Graph</p>
<p>Open Transverse Profile Graph</p> <p>Save Transverse Profile</p> <p>Save Raw Rutting Report</p> <p>Save Distance Between Rut Report</p> <p>Save Centerline Offset Rut Report</p> <p>Open Transverse Profile 3D Grayscale Graph</p> <p>Create Transverse Profile Volumes Report</p>
<p>Print Report</p> <p>Save Report</p> <p>Load Config</p> <p>Save Config</p>
<p>Create ERD File</p>

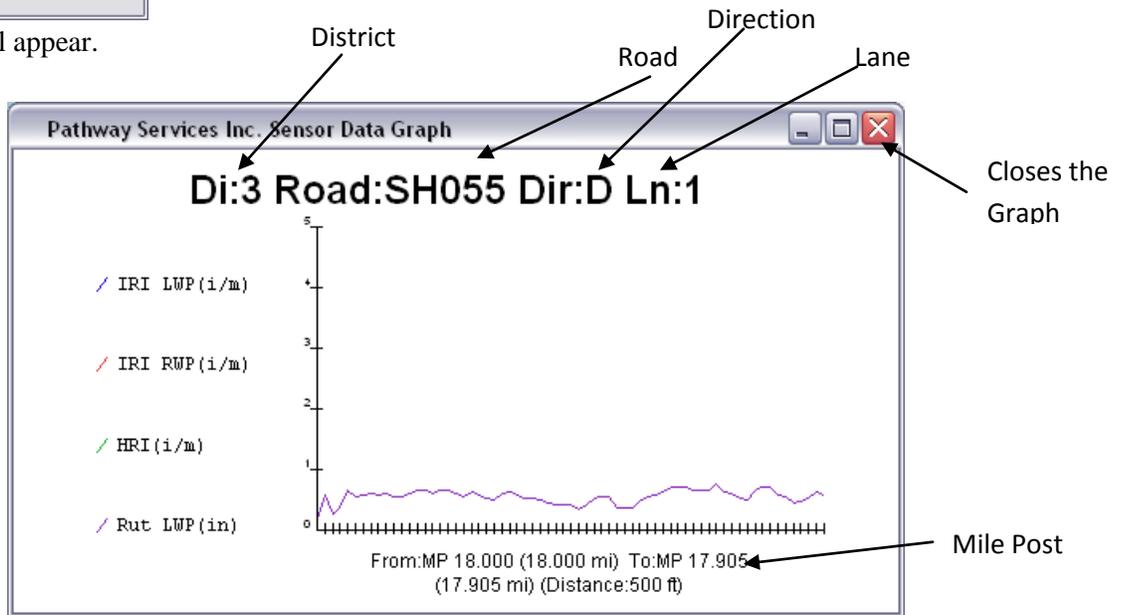
The Graphs Option screen will appear. Toggle the items wanted on and off by clicking in the box. When all the items you want are checked, Click OK.



Items can be toggled on and off by clicking in the small box. Checks “✓” means the item has been chosen.

Click OK

The graph will appear.



As the road is driven using the Digital Image Control sScreen’s double arrow buttons “>>” or “<<” you will see the changes on the graph. The changes will occur simultaneously, as the road is traveled. Using the Print Screen system it is possible to copy the graph into another program. To close the graph, press the **Red” X”** in the upper right corner.

SEVERITY ANALYSIS

Severity analysis was computed on the 2009 data using set standards developed by Pathways Inc..

Num	HRI m	IRI LOW%	IRI MED%	IRI HIG%	RUT e	STDRUT e	STDRUT A	RUT LOW%	RUT MED%	RUT HIG%	JOINT_SL	FAU	FAU num	FA
9	0.98	98.9	0.8	0.0	0.07	0.04	0.04	99.8	0.0	0.0	24	0.15	1	
10	1.23	92.4	4.5	2.4	0.06	0.04	0.04	100.0	0.0	0.0	24	0.23	3	
11	1.22	94.7	3.2	1.7	0.05	0.03	0.03	99.8	0.0	0.0	24	0.25	2	
12	1.37	93.9	3.7	2.0	0.06	0.05	0.05	99.6	0.2	0.0	24	0.25	3	
13	2.04	77.3	16.1	5.7	0.08	0.07	0.07	99.3	0.5	0.0	24	0.21	3	
14	1.48	91.5	6.7	1.0	0.11	0.08	0.08	99.8	0.0	0.0	24	0.20	1	
15	1.50	93.2	5.1	0.5	0.05	0.04	0.04	99.8	0.0	0.0	24	0.21	2	
16	1.63	92.1	6.6	0.9	0.05	0.05	0.05	99.8	0.0	0.0	24	0.30	1	
17	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	0.0	24	0.00	0	
18	1.80	88.2	8.9	1.7	0.06	0.04	0.04	100.1	0.0	0.0	24	0.32	4	
19	1.55	92.5	5.5	1.5	0.06	0.05	0.05	100.1	0.0	0.0	24	0.17	2	
20	1.55	92.0	7.2	0.5	0.12	0.12	0.12	99.3	0.4	0.0	24	0.29	1	
21	3.42	48.0	37.8	14.0	0.15	0.07	0.07	98.3	2.1	0.0	24	0.26	3	

The standards used to run the analysis in this database were:

Road Severity Factor	Severity Levels
INTERNATIONAL ROUGHNESS INDEX	
IRI LOW %	10 – 150
IRI MED. % -	150 – 300
IRI HIG %	300 - 900
RUTTING	
Rut LOW %	0.00 – 0.30
Rut MED %	0.30 – 0.70
Rut HIG %	0.70 – 5.00
FAULTING	
Fau LOW	0.03 - 0.06
Fau MED	0.06 – 0.25
Fau HIG	0.25 – 3.00
TEXTURE	
Tex LOW	0.00 – 0.04
Tex MED	0.04 – 0.08
Tex HIG	0.08 – 0.50

Severity Definitions	
IRIL	Stores the average IRI approximately every 10 ft for the left wheel path
IRIR	Stores the average IRI approximately every 10 ft for the right wheel path
HRI	Stores the average half car roughness approximately every 10 ft
Rut L	Stores the average rut approximately every 10 ft for the left wheel path
Rut R	Stores the average rut approximately every 10 ft for the right wheel path
Tex L	Stores the average texture over 10 ft in the left wheel path
Tex R	Stores the average texture over 10 ft in the right wheel path
Fau L	Stores the number of faults in the left wheel path
Fau R	Stores the number of faults in the right wheel path
Fau C	Stores the number of faults in the center of the lane

SEVERITY REPORTS

Under the Sensor heading.

File	Edit	Options	Image	Sensor	GPS	Help												
Num	Proje	MapID	Dis	Route	Di	Co	Road	FRIPost	TRIPost	From	To	DD	StartRef	Offset(m)	EndRef	Offset(m)		
213	0	198	213		0	0		0.000	0.000	0.000	0.000	I	0	0.000	0	0.000		
214	1	199	214	1010	3	0	10084	121.094	121.000	121.094	121.000	D	0	0.000	0	0.000		
215	1	200	215	1010	3	0	10084	121.000	120.000	121.000	120.000	D	0	0.000	0	0.000		
216	1	201	216	1010	3	0	10084	120.000	119.000	120.000	119.000	D	0	0.000	0	0.000		
217	1	202	217	1010	3	0	10084	119.000	118.000	119.000	118.000	D	0	0.000	0	0.000		
218	1	203	218	1010	3	0	10084	118.000	117.000	118.000	117.000	D	0	0.000	0	0.000		
219	1	204	219	1010	3	0	10084	117.000	116.000	117.000	116.000	D	0	0.000	0	0.000		
220	1	205	220	1010	3	0	10084	116.000	115.000	116.000	115.000	D	0	0.000	0	0.000		
221	1	206	221	1010	3	0	10084	115.000	114.393	115.000	114.393	D	0	0.000	0	0.000		
222	1	207	222	1010	3	0	10084	114.485	114.000	114.485	114.000	D	0	0.000	0	0.000		
223	1	208	223	1010	3	0	10084	114.000	113.000	114.000	113.000	D	0	0.000	0	0.000		
224	1	209	224	1010	3	0	10084	113.000	112.000	113.000	112.000	D	0	0.000	0	0.000		
225	1	210	225	1010	3	0	10084	112.000	111.000	112.000	111.000	D	0	0.000	0	0.000		

Choose Print Report

- Open/Close Graph
- Print Graph
- Copy Graph

- Open Transverse Profile Graph
- Save Transverse Profile
- Save Raw Rutting Report
- Save Distance Between Rut Report
- Save Centerline Offset Rut Report
- Open Transverse Profile 3D Grayscale Graph
- Create Transverse Profile Volumes Report

- Print Report
- Save Report
- Load Config
- Save Config

- Create ERD File

Choose the option(s) needed by toggling the options on and off by clicking in the box(es).

Print Sensor Report

IRI LWP Metric (m/k) IRI Min Value IRI Max Value IRI %Low/Med/High
 IRI RWP Metric (m/k) IRI STD IRI Average
 IRI Metric (m/k)

Rut LWP Metric (mm) Rut Min Value Rut Max Value Rut %Low/Med/High
 Rut RWP Metric (mm) Rut STD Rut Average
 Rut CEN Metric (mm)

Texture LWP Metric (mm) Tex Min Value Tex Max Value Tex %Low/Med/High
 Texture RWP Metric (mm) Tex STD Tex Average
 Texture CEN Metric (mm)

Faulting Metric (mm) Fau Min Value Fau Max Value Fau %Low/Med/High
 Fau STD

RQI LWP RQI Min Value RQI Max Value RQI %Low/Med/High
 RQI RWP RQI STD RQI Average

Gyroscope Heading/Grade/CS
 Report Interval (feet) Normalize
 Unchk=Use Mile Distance/Chk=Use MP Ref.
 Include GPS Lat/Lon

Severity Levels		
	From	To
IRI Low (i/m)	<input type="text" value="0"/>	<input type="text" value="0"/>
IRI Med (i/m)	<input type="text" value="0"/>	<input type="text" value="0"/>
IRI High (i/m)	<input type="text" value="0"/>	<input type="text" value="0"/>
Rut Low (i)	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>
Rut Med (i)	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>
Rut High (i)	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>
Tex Low (i)	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>
Tex Med (i)	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>
Tex High (i)	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>
Fau Low (i)	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>
Fau Med (i)	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>
Fau High (i)	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>
RQI Low	<input type="text" value="0"/>	<input type="text" value="0"/>
RQI Med	<input type="text" value="0"/>	<input type="text" value="0"/>
RQI High	<input type="text" value="0"/>	<input type="text" value="0"/>

When complete, click OK. Severity Levels can be changed according to the Business standards set by the agency.

Enter Parameters

Fields marked to be exported or imported:

- Road
- DD
- FRIPost
- TRIPost
- Len
- Route
- Di
- Co
- Comments
- Start-Latitude
- Start-Lon
- End-Lat
- End-Lon

From this record
 To this record

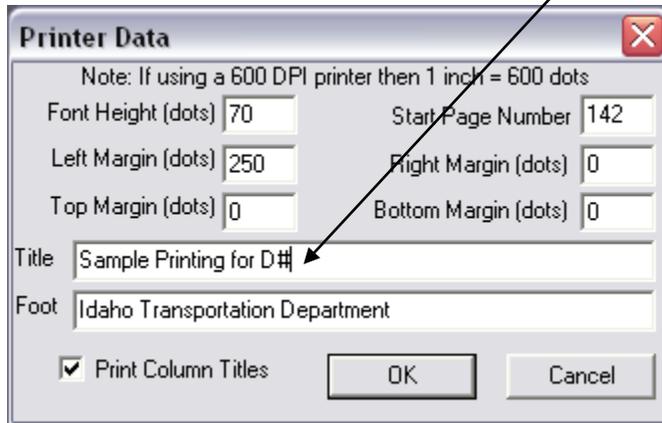
Delimiter Leading Trailing
 Return Chr
 Newline Chr
 Include Line Num.
 Ignore rut if concrete
 Ignore faults if asphalt
 Export Field Titles

Click OK

The standard mileage formatting for the system is 0.10 mile increments. This distance can be changed by changing this number.

The screen will remind you of which columns you highlighted in the Road Condition Information System screen. Click Ok.

Fill in the data for your printer. Give the report a unique name. Click OK.

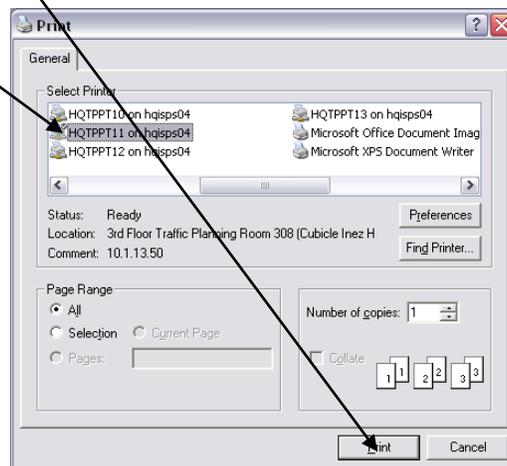


The 'Printer Data' dialog box contains the following fields and controls:

- Note: If using a 600 DPI printer then 1 inch = 600 dots
- Font Height (dots): 70
- Start Page Number: 142
- Left Margin (dots): 250
- Right Margin (dots): 0
- Top Margin (dots): 0
- Bottom Margin (dots): 0
- Title: Sample Printing for D#
- Foot: Idaho Transportation Department
- Print Column Titles
- OK button
- Cancel button

Reports come out looking very similar – remember to give them each a unique name.

Choose the printer and press Print.

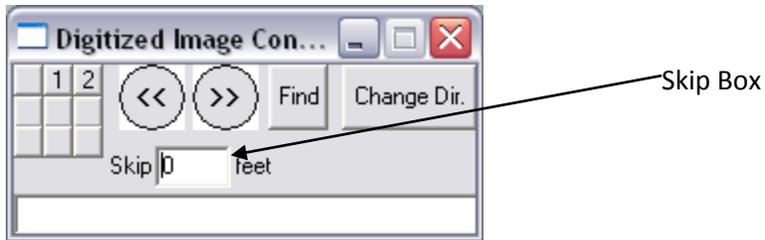


The 'Print' dialog box shows the following configuration:

- General tab selected
- Select Printer: HQTPPT11 on hqjps04 (highlighted)
- Status: Ready
- Location: 3rd Floor Traffic Planning Room 308 (Cubicle Inez H)
- Comment: 10.1.13.50
- Page Range: All (selected)
- Number of copies: 1
- Collate: 1, 2, 3 (selected)
- Print button
- Cancel button

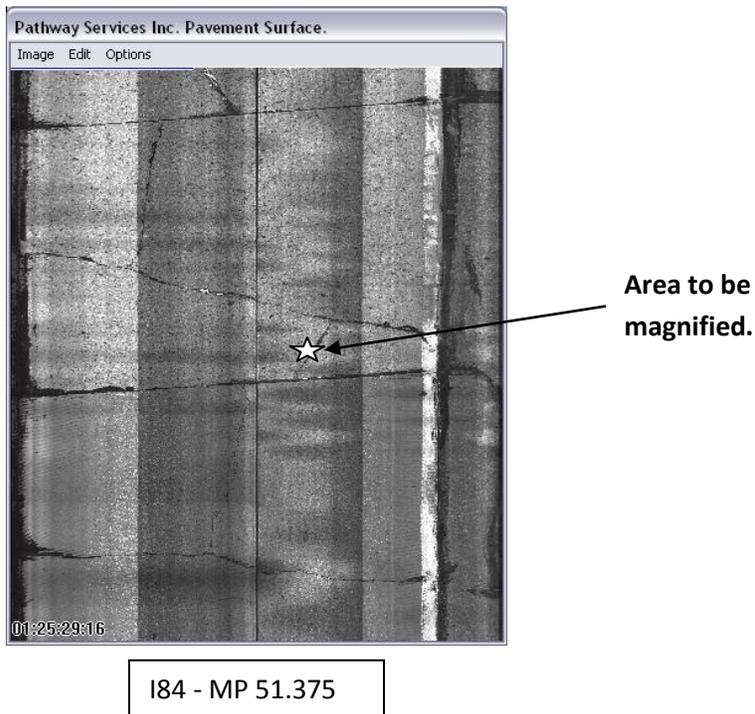
SKIP BOX

The Skip Box on the Digitized Image Control screen is used to move along the road at longer intervals. Images are taken every 26.4 feet. If precise definition is not needed – you can enter another value in the box. If you enter 100 – 3 out of every 4 images will be skipped. This will give you a faster display. If you are just scanning a road – 100 ft is useful. Then change the interval to 0 when you want to see definite details. Word of caution - when skipping – always turn off the 360° view (#8) and the pavement/linescan view (#7), they tend to really bog the system down.

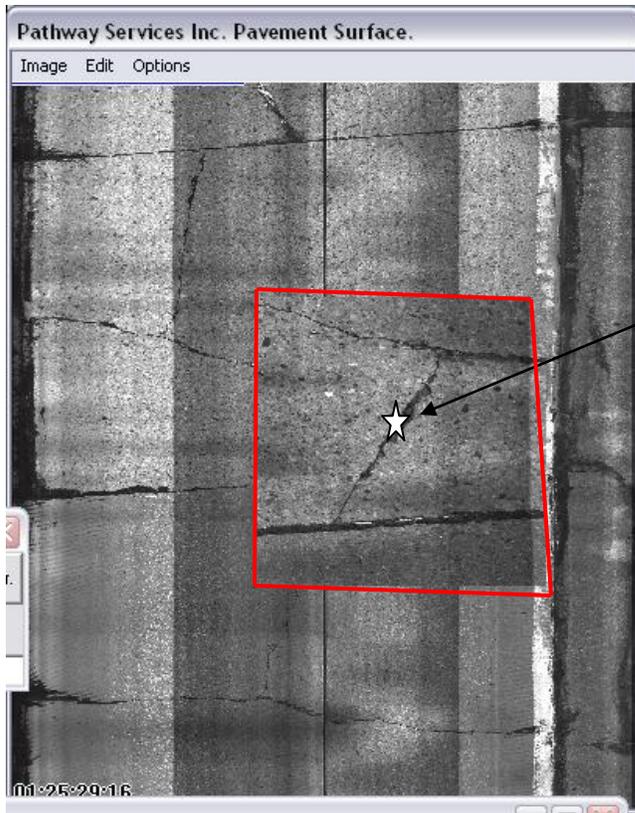


ZOOM VIEW

Zoom works in both the Pavement/Linescan and Perspective views.



Hold the Shift key down as you simultaneously right click with the mouse and drag it to cover the area you want to view. Continue holding the shift key and drag the mouse – to perform a roaming zoom in the pavement/linescan view. Crack resolution to 1mm is possible using the magnifier function. To release the scanning feature just click in another view.



Zoomed Area

To get the best zoomed image – make the zoom box more of a rectangular shape.

Repeat the procedures listed above to scan in the perspective views Number 1 and 2. A roaming scan cannot be performed in the perspective views.



Item to be magnified

Magnified Item. To disengage the zoom feature, click on the image.



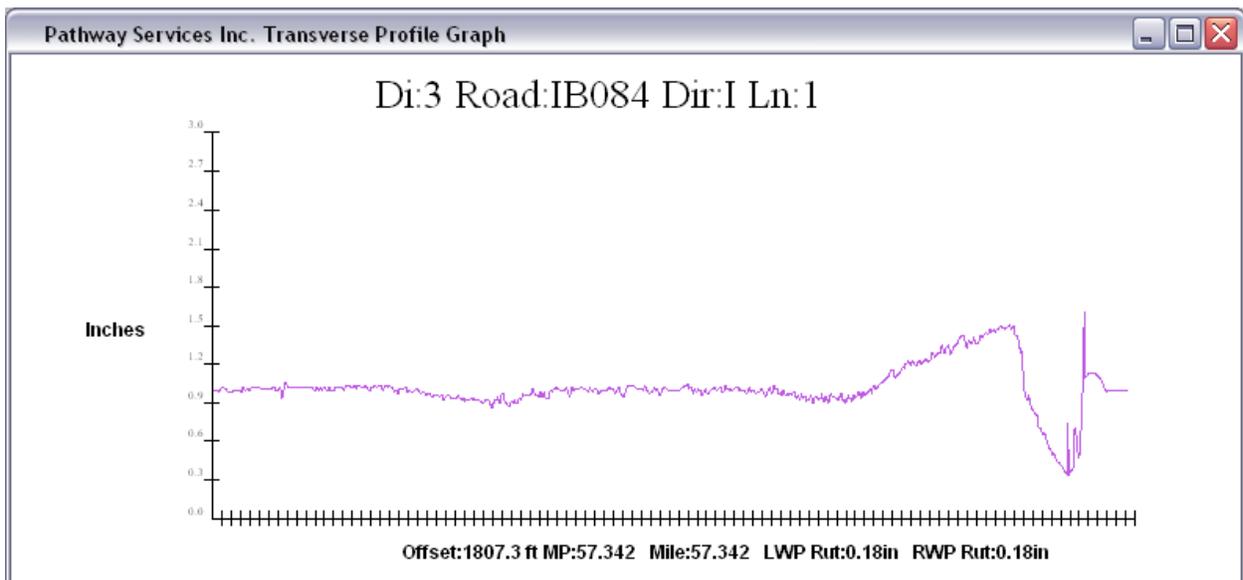
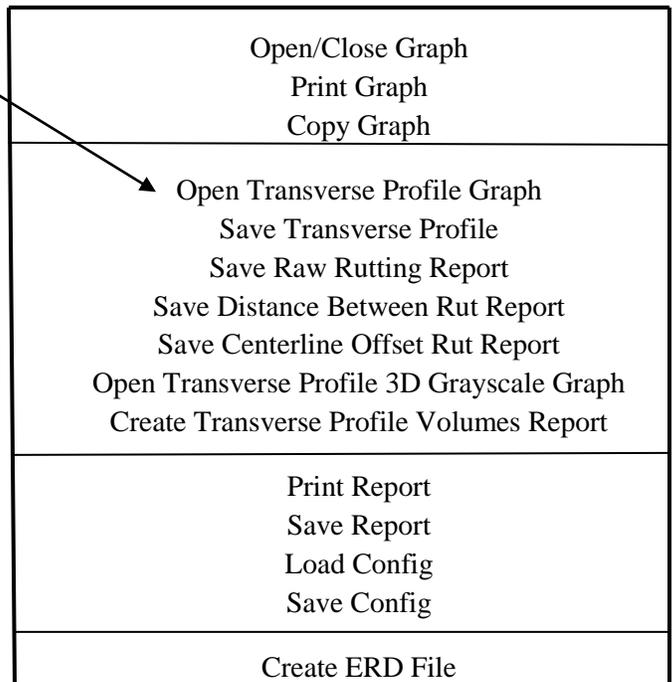
TRANSVERSE GRAPHS

This option creates a graph from the INO Laser Rutting Measurement System on the Van. It displays the transverse profile of the lane using up to 1,280 points collected with the INO Laser system. To create a graph, click on Sensor.

Blue lettering indicates data columns are selected.

File	Edit	Options	Image	Sensor	GPS	Help											
Num	ime	FiNu	FileRec	IRI L e	IRI R e	IRI A e	HRI e	IRI L m	IRI R m	IRI A m	HRI m	IRI LOW%	IRI MED%	IRI HIG%	RUT e	STRUT	
9	:05	46	0	64	89	77	62	1.01	1.40	1.21	0.98	98.9	0.8	0.0	0.07	0.1	
10	:09	47	0	81	107	94	78	1.28	1.69	1.48	1.23	92.4	4.5	2.4	0.06	0.1	
11	:12	48	0	76	114	95	77	1.20	1.80	1.50	1.22	94.7	3.2	1.7	0.05	0.1	
12	:14	49	0	86	113	100	87	1.36	1.78	1.57	1.37	93.9	3.7	2.0	0.06	0.1	
13	:17	50	0	128	174	151	129	2.02	2.75	2.38	2.04	77.3	16.1	5.7	0.08	0.1	
14	:20	51	0	94	123	109	94	1.48	1.94	1.71	1.48	91.5	6.7	1.0	0.11	0.1	
15	:22	52	0	86	133	110	95	1.36	2.10	1.73	1.50	93.2	5.1	0.5	0.05	0.1	
16	:24	53	0	97	145	121	103	1.53	2.29	1.91	1.63	92.1	6.6	0.9	0.05	0.1	
17	:00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.1	
18	:29	56	0	98	158	128	114	1.55	2.49	2.02	1.80	88.2	8.9	1.7	0.06	0.1	
19	:32	57	0	84	138	111	98	1.33	2.18	1.75	1.55	92.5	5.5	1.5	0.06	0.1	
20	:34	58	0	103	139	121	98	1.63	2.19	1.91	1.55	92.0	7.2	0.5	0.12	0.1	
21	:34	59	0	231	276	254	217	3.65	4.36	4.00	3.42	48.0	37.8	14.0	0.15	0.1	

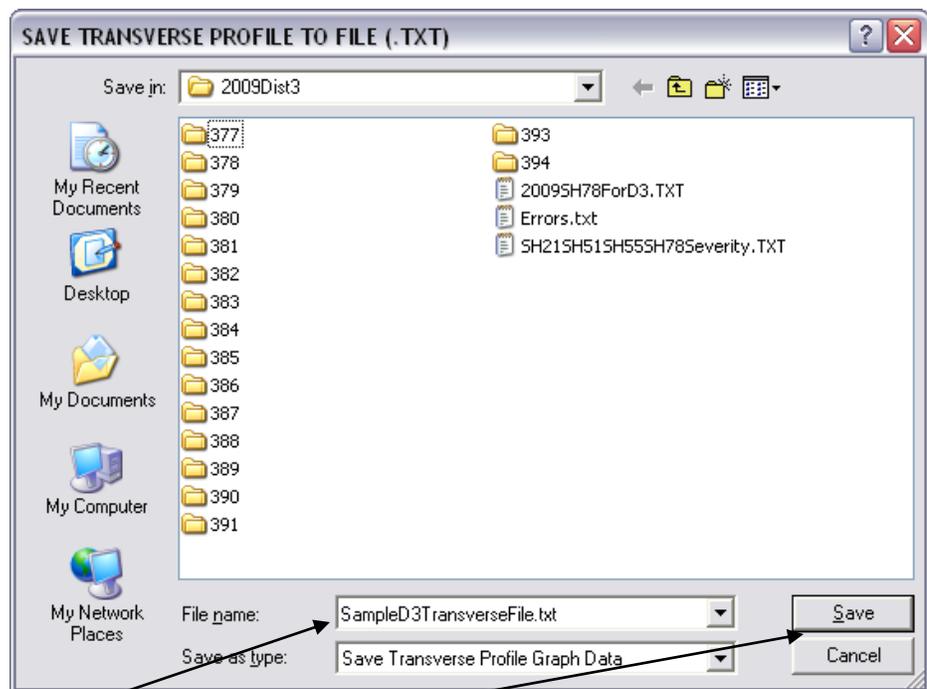
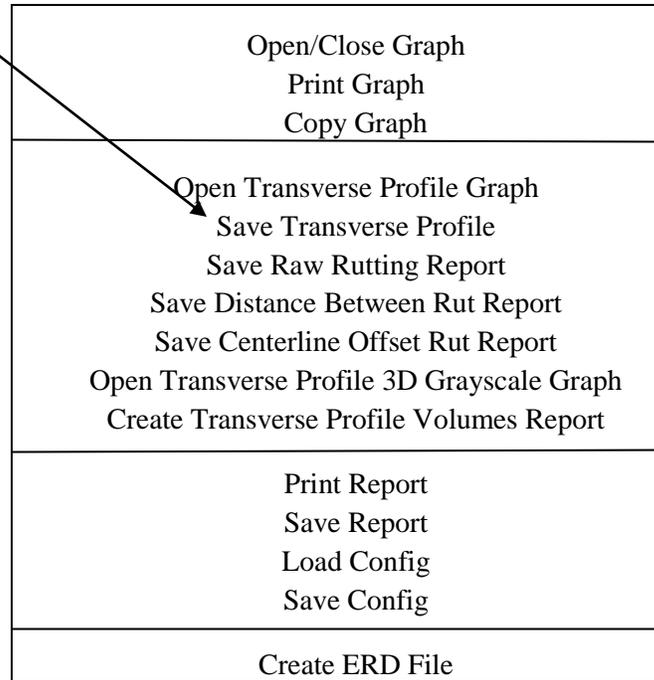
Click on Open Transverse Profile Graph.



The graph is synchronized with the image and is updated as you move forward or backward in the digital images using the Digital Image Control screen.

SAVING TRANSVERSE FILE:

Click on Save Transverse Profile



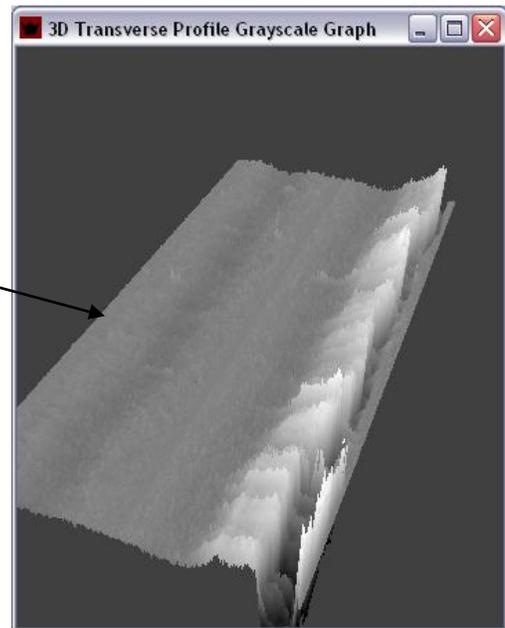
Type in the name of the file and press Save.

TRANSVERSE PROFILE 3D GRAPH

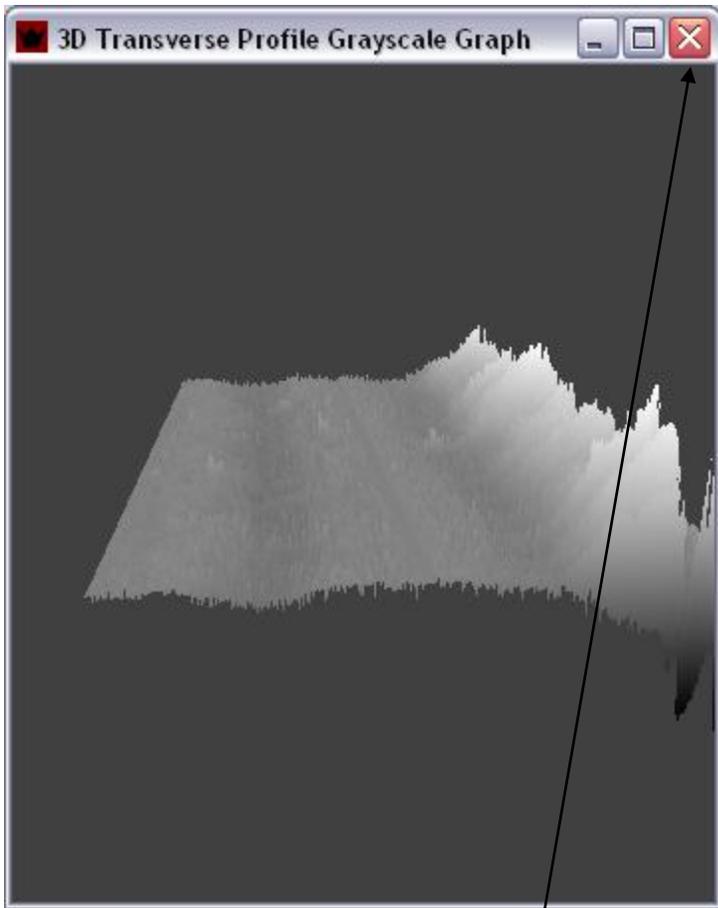
Under Sensor in the Road Condition Information System screen, Choose Open Transverse Profile 3D Grayscale Graph

Open/Close Graph Print Graph Copy Graph
Open Transverse Profile Graph Save Transverse Profile Save Raw Rutting Report Save Distance Between Rut Report Save Centerline Offset Rut Report Open Transverse Profile 3D Grayscale Graph Create Transverse Profile Volumes Report
Print Report Save Report Load Config Save Config
Create ERD File

By placing your mouse on the 3D graph, and holding the left mouse key down, you can change the perspective view of the graph.



Note: A transverse profile is created about every 5 ft. For the 3D display, vertical measurements are exaggerated about 3 times.

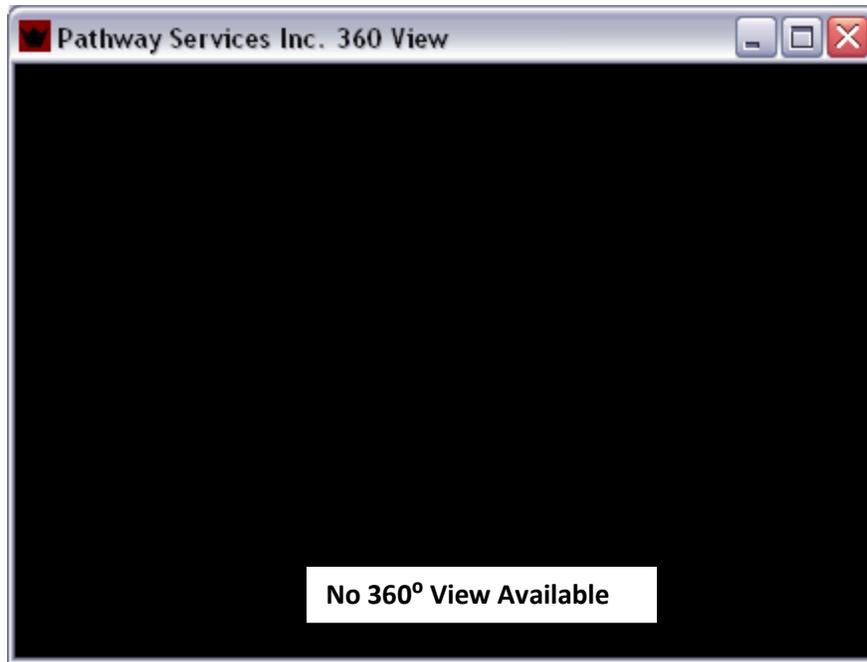


Straight on
View of the
road surface.

Close out the 3D graph by press the Red "X" in the upper right corner of the graph.

TROUBLESHOOTING THE VIDEOLOG SOFTWARE

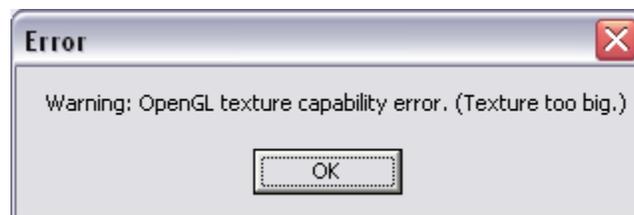
360° CAMERA



The 360° view will remain black until an intersection is shot. On the bottom of the Digitized Image Control screen, this message will appear –

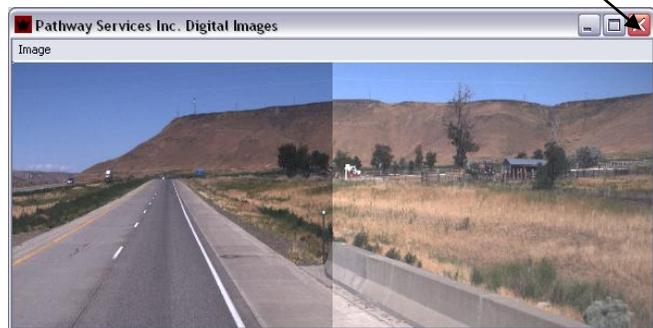
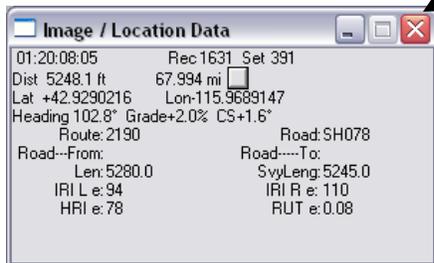
ERROR: Cant find Close 360 Image.

If the following message appears when viewing the 360° – your video card is not capable of viewing the 360° image. It is recommended that you have an onboard video memory card of at least 256 mb. THIS ONLY AFFECTS THE 360° IMAGES!

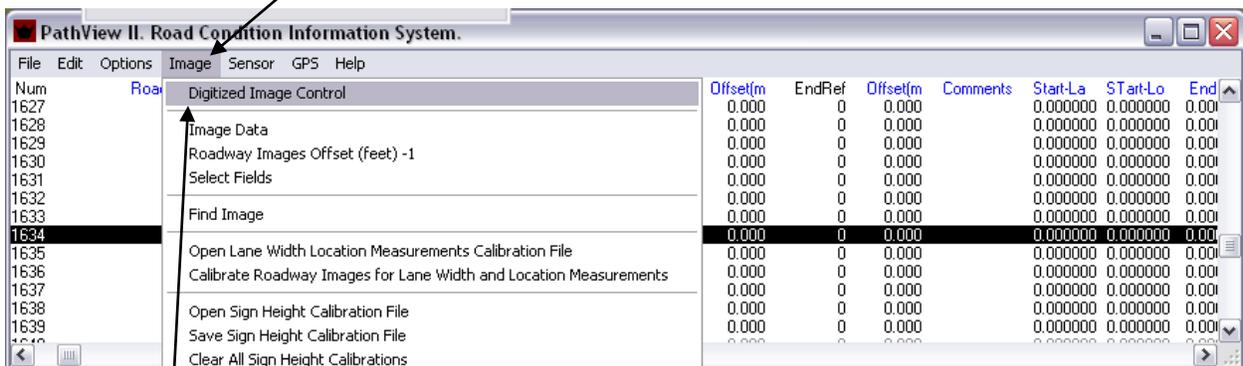


CANNOT SEE THE IMAGES

This is caused by closing the software with the red "X" on the Digital Image screen, or the Digitized Image Control screen. You will not see the Digital Image screens, the next time you open the software.



To rectify this problem, click on Image in the Road Condition Information screen.



Then choose Digitized Image Control. This will reactivate the Digital Image screens.

CANNOT LOCATE THE ROAD IN THE DESCENDING DIRECTION

Using the Change Direction key or just searching for the descending route of a road and it can't be located. Scroll to the right of the database using the bar at the bottom. When you get to the heading Set – if there are “0” in the column – the route was not shot.

Num	Alk(ft)	Len(ft)	SvyLeng(ft)	Dff(ft)	LN	D	Lw(ft)	Rlw(ft)	NL	ST	P	Set	Start-Image	End-Image	SurveyDateTime	FIN
2365	0	5280.0	0.0	-5280	1	D	12	36	2	0	A	0	00:00:00:00	00:00:00:00	00/00/1900 00:00	
2366	0	5280.0	0.0	-5280	1	D	12	36	2	0	A	0	00:00:00:00	00:00:00:00	00/00/1900 00:00	
2367	0	5280.0	0.0	-5280	1	D	12	36	2	0	A	0	00:00:00:00	00:00:00:00	00/00/1900 00:00	
2368	0	5280.0	0.0	-5280	1	D	12	36	2	0	A	0	00:00:00:00	00:00:00:00	00/00/1900 00:00	
2369	0	5280.0	0.0	-5280	1	D	12	36	2	0	A	0	00:00:00:00	00:00:00:00	00/00/1900 00:00	
2370	0	5280.0	0.0	-5280	1	D	12	36	2	0	A	0	00:00:00:00	00:00:00:00	00/00/1900 00:00	
2371	0	5280.0	0.0	-5280	1	D	12	36	2	0	A	0	00:00:00:00	00:00:00:00	00/00/1900 00:00	
2372	0	0.0	0.0	0	1	N	12	36	2	0	A	0	00:00:00:00	00:00:00:00	00/00/1900 00:00	
2373	0	5280.0	5231.7	-48	1	D	12	36	4	0	A	381	00:53:15:09	00:54:25:24	06/11/2009 00:23	5
2374	0	5280.0	5274.0	-6	1	D	12	36	4	0	A	381	00:54:25:24	00:55:36:27	06/11/2009 00:26	5
2375	0	0.0	0.0	0	1	N	12	36	2	0	A	0	00:00:00:00	00:00:00:00	00/00/1900 00:00	

Set numbers - denote that the direction was shot.

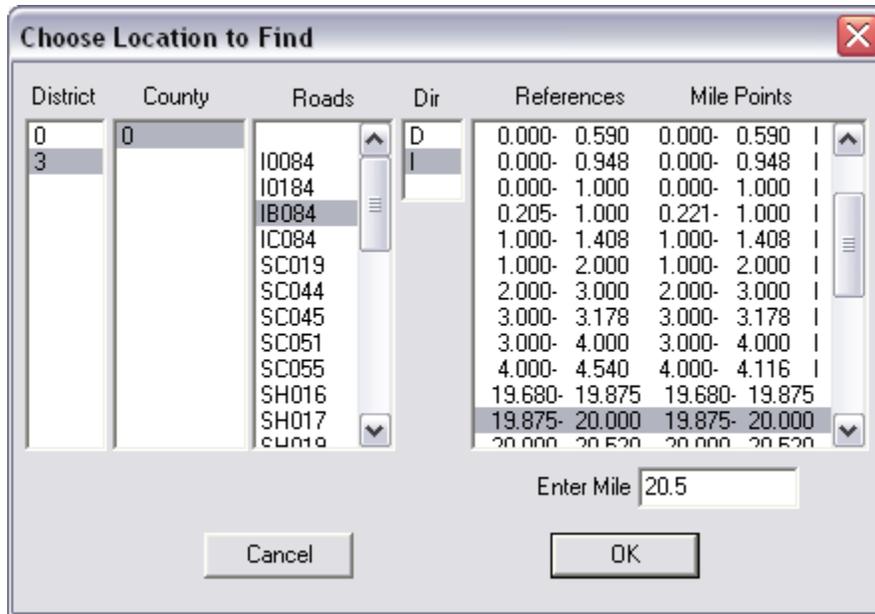
RUNNING SLOW OR JERKY

Several tips to eliminate this problem.

1. Verify that Service Pack 3 is loaded on the system. The software was designed for Service Pack 3. The help desk can assist you to bring you system up-to-date.
2. If you are using the following views - turn them off: pavement/linescan view (#7), the 360° (#8) and any of the graph features. They all use a substantial amount of CPU resources, so consequently the system will run slower.

FIND FEATURE DOES NOT WORK

When a user pulls up the find feature – you choose the road, direction and then type in the mile point that you want to locate.



If you get the following message, it means that the mile point does not appear within the reference mile points that you choose. The user then needs to either type a mile point within the reference mile points (19.9) or choose the next line down in the screen that contains the mile point 20.5



If you have any questions or problems – contact Inez Hopkins in Planning - Roadway Data at 208-334-8226 or email at Inez.hopkins@itd.idaho.gov.

Thank you!

